

REMARKS

In the outstanding Office Action¹, the Examiner rejected claims 1-50, 52-60, and 62-69 on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1-26 of U.S. Patent No. 6,349,849 to Sato et al. ("Sato") in view of U.S. Patent No. 6,061,793 to Tewfik et al. ("Tewfik"); and rejected claims 1-50, 52-60, and 62-69 under 35 U.S.C. § 102(e) as being anticipated by Tewfik. No claims are amended herein, and claims 1-50, 52-60, and 62-69 remain pending in this application.

Applicants appreciate the courtesy extended to Applicant's representative in the telephone interview conducted on March 20, 2007. In the interview, Applicant's representative presented arguments distinguishing the scaling process of Tewfik Applicant's claimed "shifting ... in the direction of the frequency axis," as recited in independent claims 1, 25, 50, and 60.

In view of the presented arguments, the Examiner acknowledged that there may be differences between Tewfik's scaling and Applicant's claimed "shifting." The Examiner further tentatively agreed to withdraw the current rejections of claims 1-50, 52-60, and 62-69 involving Tewfik upon receiving a written response incorporating the presented arguments. The Examiner added that she would then reconsider this application, and perform a new search to attempt to find additional prior art.

¹ The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicant declines to automatically subscribe to any statement of characterization in the Office Action.

Applicant respectfully traverses the rejection of claims 1-50, 52-60, and 62-69 under 35 U.S.C. § 102(e) for at least the reason that Tewfik fails to anticipate claims 1-50, 52-60, and 62-69. Tewfik cannot anticipate claims 1-50, 52-60, and 62-69 because Tewfik fails to disclose at least "shifting the predetermined number of orthogonal coefficients by a predetermined number of units in the direction of the frequency axis," as recited in independent claims 1, 25, 50, and 60, and required by dependent claims 2-24, 26-49, 52-59, and 62-69.

In the outstanding Office Action, the Examiner asserts that Tewfik discloses this feature, stating:

Tewfik teaches damping and shifting a predetermined number of orthogonal transform coefficients selected from the plurality of orthogonal transform coefficients by damping the predetermined number of orthogonal transform coefficients (the PN sequence of a maximum length) by a predetermined amount (masking filter, since the PN sequence is filtered with a masking filter) and shifting the predetermined number of coefficients by a predetermined number of units (the scale factor) in the direction of the frequency axis (based on the frequency axis) Office Action, pages 3-4.

Applicant disagrees with the Examiner's assertion and submits that Tewfik cannot anticipate claims 1, 25, 50, and 60.

The Examiner has apparently characterized Tewfik's scaling process as corresponding to Applicant's claimed "shifting ... in the direction of the frequency axis."

With respect to scaling, Tewfik discloses:

the resulting masked watermark is scaled by scale factor 44, and then in step 46 is scaled by the audio signal as each segment thereof has been weighted with a Hanning window in step 36 and as has then been extracted by an extract envelope in step 48. The resulting scaled masked water

mark is in step 50 added to the audio signal . . . Tewfik, col. 8, lines 59-64.

Tewfik provides no disclosure of what direction, if any, the resulting masked watermark is scaled in, and certainly does not disclose that the resulting masked watermark is scaled in the direction of the frequency axis.

Moreover, in the signal processing art, the terms “scaling” and “shifting” have different meanings. For example, scaling usually refers to altering according to a predetermined standard, while shifting may refer to causing the movement of a spectral band or line. As shown in Fig. 4(a) of Tewfik, the scaling operation is performed using multiplier 42 to multiply the signal by a predetermined scaling factor 44. That is, the scaling operation of Tewfik is a multiplication operation. However, Applicant’s claimed “shifting” merely moves “orthogonal coefficients . . . in the direction of the frequency axis.” There is no multiplication required, and thus the claimed “shifting” process is fundamentally different from Tewfik’s disclosed “scaling.” Figs 3A and 3B, for example, illustrate an example of the claimed “shifting.”

For at least the reasons above, Applicant submits that Tewfik fails to disclose “shifting the predetermined number of orthogonal coefficients by a predetermined number of units in the direction of the frequency axis,” as recited in independent claims 1, 25, 50, and 60 (emphasis added). Accordingly, the rejection of these claims under 35 U.S.C. § 102(e) should be withdrawn.

Claims 2-24, 26-49, 52-59, and 62-69 depend from claims 1, 25, 50, and 60, and thus require all of the features recited in claims 1, 25, 50, and 60. Because Tewfik fails to disclose each and every feature recited in the independent claims, Tewfik also fails to disclose every feature required by the dependent claims. Accordingly, Applicant

respectfully requests that the Examiner withdraw the rejection of claims 2-24, 26-49, 52-59, and 62-69 under 35 U.S.C. § 102(e).

Applicant traverses the rejection of claims 1-50, 52-60, and 62-69 under the judicially created doctrine of obviousness-type double patenting, on the ground that claims 1-50, 52-60, and 62-69 are not merely an obvious variation of claims 1-26 of Sato.

Independent claims 1, 25, 50, and 60 recite a combination including at least “shifting the predetermined number of orthogonal coefficients by a predetermined number of units in the direction of the frequency axis.” Sato’s claims do not require at least this feature, and at page 3 of the Office Action, the Examiner acknowledges that Sato “does not specifically claim damping and shifting” (emphasis added). To attempt to cure the deficiency of Sato, the Examiner cites Tewfik. Office Action, page 3. As discussed above, however, Tewfik fails to teach or suggest at least “shifting the predetermined number of orthogonal coefficients by a predetermined number of units in the direction of the frequency axis,” as recited in independent claims 1, 25, 50, and 60, and required by dependent claims 2-24, 26-49, 52-59, and 62-69. Tewfik thus cannot be relied upon for curing the noted deficiency of Sato.

Because Sato does not recite or suggest at least this feature, and Tewfik also does not disclose this feature, claims 1, 25, 50, and 60, and all claims that depend therefrom, are not obvious variants of claims 1-26 of Sato. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection of claims 1-50, 52-60, and 62-69 on the ground of nonstatutory obviousness-type double patenting.

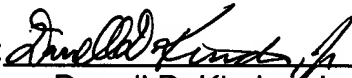
In view of the foregoing remarks, Applicant submits that this claimed invention is neither anticipated nor rendered obvious in view of the prior art references cited by the Examiner. Applicant therefore requests the Examiner's reconsideration of the application, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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